

<b>PRE-APPEAL BRIEF REQUEST FOR REVIEW</b>		Docket Number (Optional)  PA3445US																	
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]  on _____  Signature _____  Typed or printed name _____	Application Number  10/816,217		Filed  2004-04-01																
	First Named Inventor  Nicholas A. J. Millington																		
	Art Unit  2442	Examiner  Jeffrey L. Nickerson																	
<p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p>  <p>This request is being filed with a notice of appeal.</p>  <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p>  <p>I am the</p> <table style="width: 100%; border: none;"><tr><td style="width: 50%; vertical-align: top; padding: 5px;"><input type="checkbox"/> applicant/inventor.</td><td style="width: 50%; vertical-align: top; padding: 5px; text-align: right;">/Ian C. Schick/</td></tr><tr><td style="vertical-align: top; padding: 5px;"><input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)</td><td style="vertical-align: top; padding: 5px; text-align: right;">Signature</td></tr><tr><td style="vertical-align: top; padding: 5px;"><input checked="" type="checkbox"/> attorney or agent of record. Registration number 63,293</td><td style="vertical-align: top; padding: 5px; text-align: right;">Ian C. Schick</td></tr><tr><td style="vertical-align: top; padding: 5px;"><input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____</td><td style="vertical-align: top; padding: 5px; text-align: right;">Typed or printed name</td></tr><tr><td></td><td style="vertical-align: top; padding: 5px; text-align: right;">650-812-3400</td></tr><tr><td></td><td style="vertical-align: top; padding: 5px; text-align: right;">Telephone number</td></tr><tr><td></td><td style="vertical-align: top; padding: 5px; text-align: right;">October 13, 2009</td></tr><tr><td></td><td style="vertical-align: top; padding: 5px; text-align: right;">Date</td></tr></table> <p>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.</p>				<input type="checkbox"/> applicant/inventor.	/Ian C. Schick/	<input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)	Signature	<input checked="" type="checkbox"/> attorney or agent of record. Registration number 63,293	Ian C. Schick	<input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____	Typed or printed name		650-812-3400		Telephone number		October 13, 2009		Date
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This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Nicholas A. J. Millington  
APPLICATION NO. : 10/816,217  
FILING DATE: April 1, 2004  
TITLE: System and Method for Synchronizing Operations among a Plurality of Independently Clocked Digital Data Processing Devices  
EXAMINER: Jeffrey L. Nickerson  
ART UNIT: 2442  
CONF. NO.: 7302  
ATTY. DKT. NO.: PA3445US

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BRIEF IN SUPPORT OF PRE-APPEAL REQUEST FOR REVIEW

In the final office action mailed July 13, 2009 (*Final Action*), the Examiner asserts that independent claims 577, 590, and 600 are rejected under 35 U.S.C. § 103(a) as being unpatentable over “A Multimedia Synchronization Protocol for Multicast Groups” (*Benslimane*) in view of “Precision Synchronization of Computer Network Clocks” (*Mills*). This rejection was maintained in the advisory action mailed September 28, 2009 (*Advisory Action*). The Applicant respectfully disagrees and requests pre-appeal review.

**ERROR I: The Examiner failed to properly respond to arguments provided by the Applicant thus denying a full and fair hearing.**

The Section 103 rejection included in the *Final Action* is essentially a restatement of the rejection included in the office action mailed January 22, 2009 (*Office Action*). The Applicant provided arguments against the Section 103 rejection in the response dated April 22, 2009 (*Response D*). The Applicant does not believe the Examiner properly responded to the arguments included in *Response D* in the *Final Action*. Instead, the Examiner repeatedly pointed to case law and stated that “one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references.” *Final Action*, 3 (citing *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981) and *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986)). This view was reiterated in the *Advisory Action*.

The Applicant does not disagree with precedent established by the courts. The Applicant's arguments, however, were in direct response to the Examiner's assertion that certain claim elements were taught by a **single reference**. For example, the Examiner asserts that *Benslimane* discloses "output[ing] the media stream via two or more playback devices in synchrony," as set forth in claim 590. *Office Action*, 6. The Applicant respectfully submits that when the Examiner uses a **single reference** to assert that a **particular claim element** is taught, the Applicant's attack of that singular reference is appropriate to show that the particular claim element is not disclosed by the reference, and that therefore the entire claim is not disclosed or suggested by the prior art.

Dismissing the Applicant's arguments in this manner is improper, at least, because "[w]here the applicant traverses any rejection, the examiner should, if he or she repeats the rejection, take note of the applicant's argument and **answer the substance of it.**" MPEP § 707.07(f) (emphasis added); also see *In re Soni*, 54 F.3d 746, 750 (Fed. Cir. 1995) and MPEP § 2145. Answering the substance of the Applicant's arguments is critical because "of the fact that in every case the applicant is entitled to a full and fair hearing, and that **a clear issue** between applicant and examiner should be developed." MPEP § 706.07 (emphasis added).

**ERROR II: The Examiner cannot support a rejection solely by alleging that a cited reference discloses subject matter that is outside the scope of the claims.**

To support a conclusion that the claim would have been obvious requires that **all the claimed elements** were known in the prior art and that one skilled in the art could have combined those elements. See *KSR International Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1739 (2007)(emphasis added); see also MPEP § 2143. Independent claim 590, for example, sets forth that "the source device is configured to transmit a media stream, the media stream comprising **source-clock information related to an independent clock associated with the source device**" (emphasis added). In the *Office Action* and the *Final Action*, the Examiner substitutes a portion of this claim language for a phrase that severely alters the meaning and implication of the claim as a whole, and asserts that *Benslimane* discloses this altered form of the claim language to support the Section 103 rejection. Particularly, the Examiner asserts that *Benslimane* discloses

that “the source device is configured to transmit a media stream, the media stream comprising **a time differential**.” *Final Action*, 6 (citing the “Sync message’s delta” from *Benslimane*, sect. 3.1.1) (emphasis added). The Applicant respectfully submits that the Examiner cannot support a rejection by alleging that a cited reference discloses subject matter that is outside the scope of the claims.

The **time differential** described in claim 590 (not to be confused with the **source-clock information related to an independent clock associated with the source device**) is not included in the media stream. Instead, the time differential is determined by the playback devices based on information included in the media stream (*i.e.*, the source-clock information) and the independent clocks associated with the playback devices themselves. Therefore, the **time differential** exists at the playback devices and is clearly **not** comprised by the media stream. As such, the assertion that *Benslimane* discloses “the source device is configured to transmit a media stream, the media stream comprising **a time differential**” is inconsequential and cannot be used to support the rejection under Section 103 because a “media stream comprising a time differential” is not claimed.

**ERROR III: The cited references do not disclose all of the claimed elements and therefore cannot support an obviousness rejection.**

As noted above, to support a conclusion that the claim would have been obvious requires that **all the claimed elements** were known in the prior art and that one skilled in the art could have combined those elements. See *KSR International Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1739 (2007)(emphasis added); see also MPEP § 2143. The Applicant maintains that the cited references describe approaches for solving unrelated problems and fail to disclose all of the claimed elements. Specifically, *Mills* merely discloses a network time protocol to synchronize network clocks, whereas *Benslimane* merely discloses network synchronization by measuring network propagation delays. The Applicant contends that the approaches disclosed by the references—separately or combined—would not yield synchronized consumption of data across multiple clients (*i.e.*, “output[ing] the media stream via two or more playback

devices in synchrony,” as set forth in claim 590). This contention is supported, at least, by the evidence provided below.

The media stream set forth in the claims cannot be equated to the sync message of *Benslimane*, as asserted by the Examiner. *Final Action*, 6. *Benslimane*’s sync message is merely a discrete unit of information (*i.e.*,  $\text{SYNC}(\delta_i, d_i, \tau_s, d^{max})$ ). As commonly known and thoroughly described in the record, the term ‘media stream’ is understood as a continuous sequence of audio or audio-and-video through a network. *Benslimane* is silent with respect to the sync message comprising a continuous sequence of audio or audio-and-video, and is silent with respect the sync message being included in a continuous sequence of audio or audio-and-video. The Examiner attempts to defend this clear shortcoming stating that “a reference supporting sending timing information without a media stream does not imply it does not support sending timing information within a media stream.” *Advisory Action*, continuation sheet. *Benslimane* supports the Applicant’s reasoning and directly contradicts the Examiner’s reasoning by explaining that “[i]n this paper, message broadcasts between the server and the clients are supposed to be **an atomic action where only one message is taken into account and not n**” (*Benslimane*, sect. 3 (emphasis added)), thus arguably teaching away from the claimed invention. See *In re Geisler*, 116 F.3d 1465, 1471, 43 USPQ2d 1362, 1366 (Fed. Cir. 1997).

The time differential set forth in the claims cannot be equated to the sync message’s  $\delta_i$  of *Benslimane*, as asserted by the Examiner. *Final Action*, 6. The sync message’s  $\delta_i$  is described as the “difference of time between arrival RESPONSE message from  $C_i$  and the one having made the maximum delay.” *Benslimane*, sect. 3.1.1. Contrastingly, the time differential set forth in claim 590 is “a time differential between the independent clock associated with the source device and one or more independent clocks associated with the one or more playback devices based on the source-clock information.” A time differential between independent clocks of different devices is not disclosed or obvious in view of a difference of time between two messages received by the same device.

The combination of *Benslimane* and *Mills* fails to disclose “output[ting] the media stream via two or more playback devices in synchrony **based on the time differential**,” as set forth in claim 590. The Examiner asserts, however, that *Benslimane* discloses this element in that “sect.

3.1.1 provides for calculating restitution time based on playback offset differential,” while sect. 3.1.2 “provides for inter-client synchronization.” *Final Action*, 6. The Applicant respectfully disagrees at least because a “playback offset differential” cannot be equated to the time differential of claim 590. (The Applicant notes a contradiction in the Examiner’s reasoning in that the time differential of claim 590 was first equated with the delta of the sync message (*i.e.*, the “ $\delta_i$ ” in SYNC( $\delta_i, d_i, \tau_s, d^{max}$ )), as discussed above.) The Applicant respectfully submits that, in claim 590, the “time differential [is] between the independent clock associated with the source device and one or more independent clocks associated with the one or more playback devices.” Furthermore, *Benslimane* clearly does not calculate restitution time based on playback offset differential. *Benslimane* defines restitution time as  $T_{rest_i}^1 = h_i + d^{max} - d_i$ , where  $h_i = s_i + \delta_i + 2 \cdot d_i$ . None of the variables that the restitution time is defined to be a playback offset differential ( $s_i$  = local reception time;  $\delta_i$  = difference of time between arrival RESPONSE message from  $C_i$  and the one having made the maximum delay;  $d_i$  = delay between the server  $S$  and the client  $C_i$ ; and  $d^{max}$  = the maximum delay of all clients). Clearly, *Benslimane* does not calculate restitution time based on playback offset differential, but rather as a combination of local receipt times, arrival times, and delays. As such, *Benslimane* fails to teach “output[ing] the media stream ... in synchrony based on the time differential,” as set forth in claim 590.

The Applicant respectfully requests the passage of the present application to allowance. The Examiner is invited to contact the Applicant’s undersigned representative with any questions concerning this matter.

Respectfully submitted,  
Nicholas A. J. Millington

October 13, 2009

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